In the Claims:

Claim 1 (previously presented): A method for coding a speech signal comprising:

estimating a spectral content of a speech signal by determining a defined reference spectral response representative of the spectral content of the speech signal;

selecting a preferential coding algorithm from an assortment of coding algorithms based on the estimated spectral content of the speech signal;

coding the speech signal in accordance with the selected coding algorithm, where the selected algorithm controls the operation of at least one of a pre-processing filter, a post-processing filter, a coding control coefficient, a weighting filter, a synthesis filter, and a quantization table;

wherein the coding of the speech signal in accordance with the selected coding algorithm compensates for at least one of a spectrally flat speech signal, an IRS speech signal, and a MIRS speech signal to produce a frequency-response compensated speech signal.

Claim 2 (canceled).

Claim 3 (original): The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of the pre-processing filter, the desired filter response configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

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Claim 4 (original): The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of the post-processing filter, the desired filter response configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

Claim 5 (original): The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of the weighting filter, the desired filter response configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

Claim 6 (original): The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of the synthesis filter, the desired filter response configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

Claim 7 (original): The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of at least one of the synthesis filter and the weighting filter of an adaptive codebook section of an encoder.

Claim 8 (original): The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of at least one of the synthesis filter and the weighting filter of a fixed codebook section of an encoder.

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Claim 9 (original): The method according to claim 1 wherein the quantization table comprises at least one of an adaptive codebook section and a fixed codebook section of an encoder.

Claim 10 (previously presented): A method for coding a speech signal, the method comprising:

estimating a spectral content of a speech signal by determining a defined reference spectral response representative of the spectral content of the speech signal;

varying at least one coding parameter based on the estimated spectral content of the speech signal;

coding the speech signal in accordance with the varied coding parameter, the varied coding parameter associated with at least one of a preprocessing filter, a post-processing filter, a coding control coefficient, a weighting filter, a synthesis filter, and a quantization table;

wherein the coding of the speech signal in accordance with the varied coding parameter compensates for at least one of a spectrally flat speech signal, an IRS speech signal, and a MIRS speech signal to produce a frequency-response compensated speech signal.

Claim 11 (canceled).

Claim 12 (original): The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of the pre-

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processing filter, the desired coding parameter configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

Claim 13 (original): The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of the post-processing filter, the desired coding parameter configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

Claim 14 (original): The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of the weighting filter, the desired coding parameter configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

Claim 15 (original): The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of the synthesis filter, the desired coding parameter configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

Claim 16 (original): The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of at least one of the synthesis filter and the weighting filter of an adaptive codebook section of an encoder.

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Claim 17 (original): The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of at least one of the synthesis filter and the weighting filter of a fixed codebook section of an encoder.

Claim 18 (original): The method according to claim 10 wherein the quantization table comprises at least one of an adaptive codebook section and a fixed codebook section of an encoder.

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